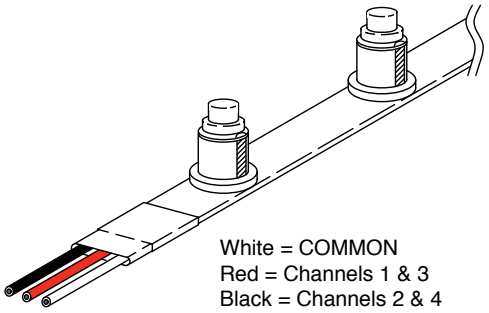
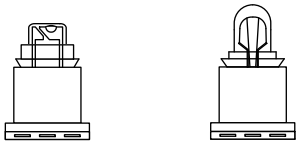
TOKISTAR LIGHTING INSTRUCTION MANUAL

Fixture Type ____ - ____ - ____ TLW Series Tapelight

General Description

Tokistar's TLW Series Tapelight is a four-channel low-voltage lighting system. The system uses two types of LEDs operating at 12 VAC or a 0.8 Watt incandescent Bi-Bulb® lamp operating at 24 VAC. Each fixture is labeled with wattage and operating voltage.





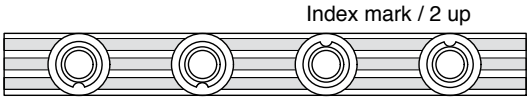
Led Bi-Bulb®

TLW - 50 - WW-HB

Socket Spacing		Light Source		
Code	Inches (mm)	Code	Style	Watts / Volts
30	1.2" (30 mm)	**WW**	2400K White LED	0.15 W / 12 VAC
50	2.0" (50 mm)	**IW**	3000K White LED	0.15 W / 12 VAC
80	3.0" (80 mm)	**WH**	6500K White LED	0.15 W / 12 VAC
100	4.0" (100 mm)	**AM**	Amber LED	0.15 W / 12 VAC
150	6.0" (150 mm)	**BL**	Blue LED	0.15 W / 12 VAC
		GR	Green LED	0.15 W / 12 VAC
		MG	Magenta LED	0.15 W / 12 VAC
		PL	Purple LED	0.15 W / 12 VAC
		RD	Red LED	0.15 W / 12 VAC
		WW-HB	HB 2400K White LED	0.30 W / 12 VAC
		IW-HB	HB 3000K White LED	0.30 W / 12 VAC
		WH-HB	HB 6500K White LED	0.30 W / 12 VAC
		BB	Bi-Bulb® Incandescent	0.8 W / 24 VAC

Bulb Positioning

Tokistar's LEDs and Bi-Bulbs have index marks. In order for the system to work properly, LEDs and Bi-Bulbs must be positioned as shown in the diagram to the right



⚠ PRECAUTIONS

1. Read all instructions completely before beginning installation.
2. Turn off electricity before beginning installation.
3. All wiring is to be performed by a qualified electrician.
4. Installation must comply with the National Electrical Code, and all applicable codes.
5. Turn main supply to transformer on only after all connections have been made and tested.
6. Use only transformers provided by Tokistar with the system.
7. Certain adhesives produce a bi-product of corrosive gas during their curing process, and should not be used in conjunction with our LED Systems where the gas cannot be vented. Consult with the Sealant company for such applications.

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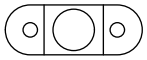
Mounting Fixtures

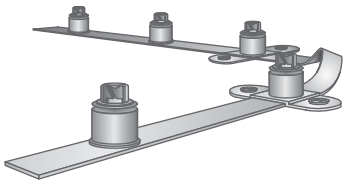
The proper mounting device is determined by the surface the Tapelight is being attached to. In addition to the devices shown, construction adhesive compatible with PVC may be used.

Option 1 - TP-01 Mounting Bracket

Place the mounting bracket over the lamp socket and screw to the desired surface. The quantity and positioning of brackets is determined by the specifics of each application. When turning corners, a bracket should be used at the start of each bend.

TP-01 Bracket

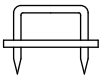




Option 2 - TP-02 Mounting Staple

The quantity and positioning of staples is determined by the specifics of each application. When turning corners, a staple should be used at the start of each bend.

TP-02 Staple

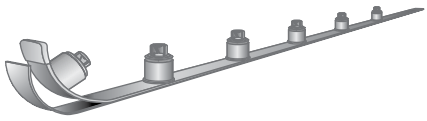


Do not penetrate the Tapelight insulation.

Option 3 - Adhesive Tape Mounting

Adhesive tapes work best on smooth, clean surfaces. First attach the adhesive tape to the surface. Then remove the protective backing and press the Tapelight securely to the adhesive.

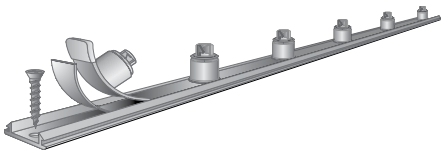
WFT-32 Adhesive Tape



Option 4 - RC-S Mounting Track

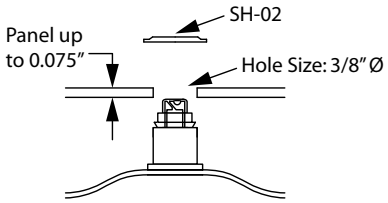
Attach the RC-S Mounting Track to the surface using screws or other secure means. Then attach Tapelight to base of channel with adhesive tape.

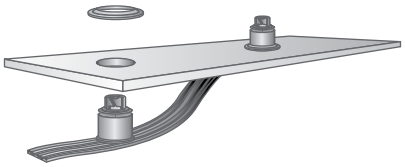
RC-S



Option 5 - SH-02 Panel Fastener

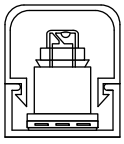
SH-02 metal fasteners securely lock Tapelight sockets in place for panel mounting. Push sockets through the hole in the panel from behind, then press the fastener in place from above.

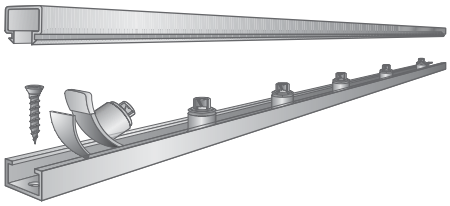




Option 6 - Decorative Channels

Attach the channel base to the surface using screws or other secure means. Then apply adhesive tape to the channel base. Remove protective backing and press Tapelight firmly to adhesive. The clear lens snaps onto the base.

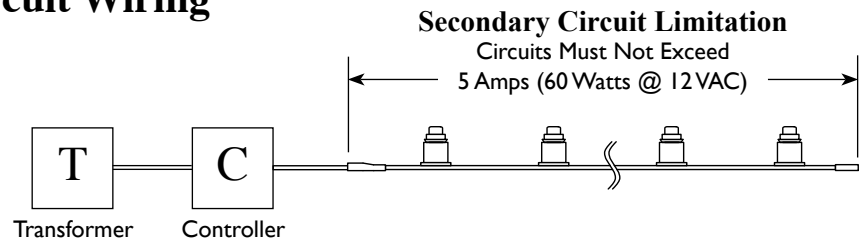




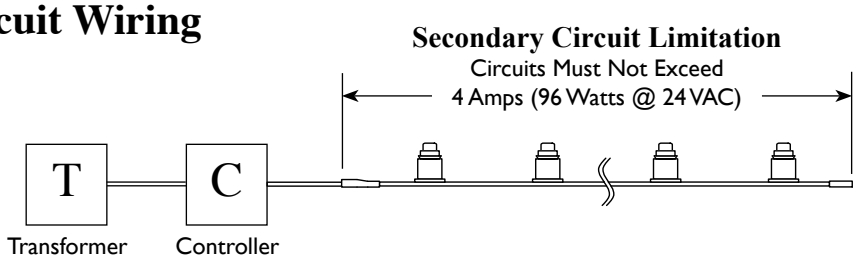
⚠ PRECAUTIONS

Fixtures must be securely mounted in place. Never position the fixture where lamps make direct contact with any surface or object.

LED System (12 volt)
Secondary Circuit Wiring



Incandescent System (24 volt)
Secondary Circuit Wiring



Maximum Run Lengths

To minimize voltage drop and keep conductors safely within their rating, do not exceed the maximum lengths shown for each independent length of Tapelight.

	LEDs / 12 VAC		Incandescent / 24 VAC
Spacing	0.15 Watt	0.30 Watt	0.80 Watt
1.2" (30 mm)	24' (7.3 M)	11' (3.4 M)	14' (4.2 M)
2.0" (50 mm)	43' (13.1 M)	19' (5.8 M)	20' (6.0 M)
3.0" (80 mm)	70' (21.4 M)	30' (9.1 M)	28' (8.5 M)
4.0" (100 mm)	84' (25.6 M)	40' (12.0 M)	30' (9.1 M)
6.0" (150 mm)	103' (31.4 M)	66' (20.0 M)	42' (12.8 M)

Recommended Lead Wire Size

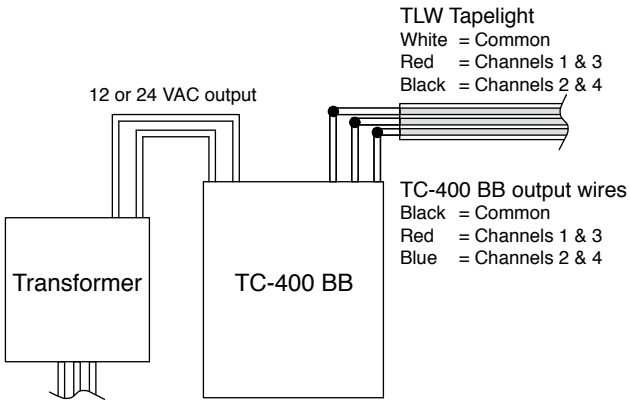
The distance from the transformer to the fixture, and the load of the fixture, will determine the proper size of secondary wire. The chart on the right indicates recommended wire size based upon a 12 volt transformer being loaded to its full capacity of 5 Amps/60 Watts or a 24 volt transformer being loaded to its full capacity of 4 Amps/96 watts. .

Secondary Lead Wires	
Wire Size	Wire Length
#16 AWG	12' (3.6 M)
#14 AWG	20' (6.1 M)
#12 AWG	30' (9.1 M)
#10 AWG	45' (13.7 M)

TC-400BB Bi-Bulb Controller

TLW Series Tapelight is designed to be used exclusively with our TC-400BB Bi-Bulb® Controller. Each controller features a variety of patterns and speed control.

For further information, please see the Instruction Manual provided with our controller.



Capacity for Class 2 Operation:

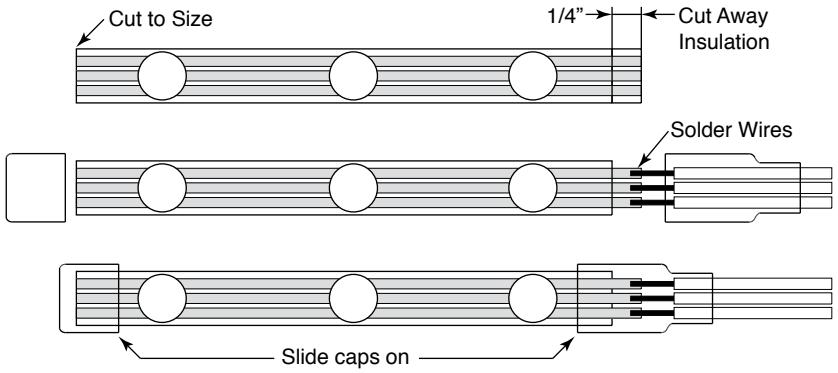
BB-301 0.8 Watt/24 VAC Lamps: 120 pieces - Total 96 Watts
TokiLeds 0.15 Watt/12 VAC LEDs: 400 pieces - Total 60 Watts
TokiLeds 0.30 Watt/12 VAC LEDs : 200 pieces - Total 60 Watts

⚠ PRECAUTIONS

Use only Class 2 transformers provided by Tokistar with the system.

Attaching Lead Wires

Your Tapelight may have been provided in bulk to be cut on site for a precise fit. Wire leads need to be attached. Follow the directions in the diagram below.

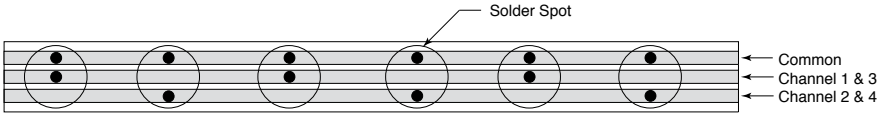


Tapelight Wiring

One of the outside conductors is the common. To determine which conductor is the common, look at the back of the Tapelight fixture. It is the one that has been soldered at each socket location. The middle conductor is channel 1 & 3, the other outside conductor is channel 2 & 4.

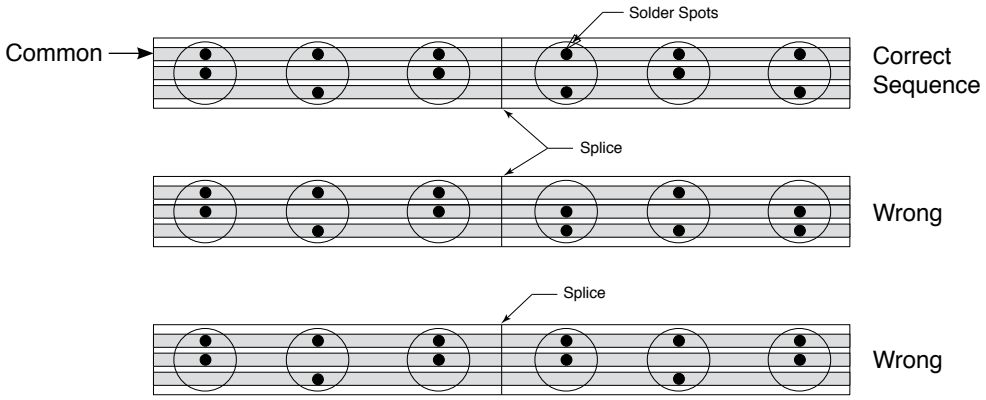
When attaching lead wires to the conductors, use the following color code:

- White = COMMON
- Red = Channel 1 & 3
- Black = Channel 2 & 4



Splicing Tapelight

Should you need to splice two sections of TLW Tapelight together, it is extremely important the conductors and sockets are positioned in the proper sequence, otherwise it will not function properly. See the diagram below.



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